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A CASE OF LITHOTOMY.

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REMARKS.

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IT has been somewhere well observed, that a Physician or Surgeon of great experience, might write a very useful work, if he would have the courage to give an account only of such methods of cure, and such cases as he had found to be ineffectual, or unsuccessful. It is with this intention, and a firm persuasion of its justness in my mind, that I now venture to communicate the following case and remarks to the Society.

Henry Brand, a sickly looking boy between seven and eight years of age, was admitted into Guy's

Hospital, the sixth of August, 1804. I learned from his mother that during the preceding year he had frequently complained of an uneasy sensation, and difficulty in making vater, which soon brought on great pain, fulness, and heat over the whole of his belly, attended with thirst, restlessness, and headach; she observed also, that these fits frequently lasted with great violence during two, and sometimes three days.

Some of the patient's symptoms being those of a calculus in the bladder, and his belly being much enlarged, he was ordered, during the first week after his admission, two gentle purgatives, preparatory to my passing the sound. Upon examining the penis for this purpose, I found the prepuce much elongated, thickened, and contracted, so that it was with difficulty I could find the orifice of the urethra, and when this was accomplished, the sound met with impediments from strictures; these also were overcome, and the sound, on entering the bladder, immediately struck against a stone, and by a little movement of the instrument soon passed by the side of it; but had no range, being precluded from lateral motion by the stone on one side, and the coats of the bladder on the other. A mild purgative, and the warm bath were ordered, to prevent the effects of irritation, which were likely to arise from the preceding difficulties, and in a few days the patient voided his urine much the same as before the examination.

As many of his complaints differed from the common symptoms attending a calculus in the bladder, I determined to defer the operation of lithotomy, till I should have an opportunity of seeing some of those paroxysms before mentioned, which his mother had stated to be of the most distressing kind; I therefore directed a gentle purgative for him twice a week, and soda water for his common drink.

During the fortnight he was under this plan, I observed (even when he was the most free from pain) that his pulse was quick, and feeble, his appetite uncertain, and that a general debility pervaded his whole habit; his urine was sometimes turbid, and at others, deposited a white ropy mucus; this mucus generally succeeded slight pains in his loins.

About this time I had an opportunity of observing the train of symptoms, which his mother seemed to have accurately described; they came on nearly in the following order: anxiety, restlessness, itching and heat along the course of the urethra, more particularly at the neck of the bladder; pain and difficulty in making water; heat, and distention of the abdomen; very quick and small pulse; slight nausea; increased difficulty in voiding his urine, which was soon followed by a complete suppression, so that, for four hours in the succeeding day, neither bougie, nor catheter could be passed; the warm bath and glysters gave relief, but it was four days before he returned to his usual state, and even then it was

with increased debility, and a peculiar anxiety, that gave the impression of the child's constantly feeling some internal distress.

About ten days after his recovery from this paroxysm, and when he was more than usually free from irritation, I made particular observation on the quantity of urine hegenerally voided at one time, which never exceeded an ounce and half, and on his power of retaining it at will; and I found that the quantity (even for eleven minutes after the usual excitement to make it had taken place) never exceeded two ounces, from which I was led to conclude, that the capacity of the bladder was considerably diminished, but that it had not lost its voluntary power of retaining the urine, or of propelling it.

I did not propose the operation at this time, from the apprehension of the consequences that I feared might ensue from such great susceptibility to inflammatory action, and from the weak state to which the patient was reduced, and I was also not without a hope, that the powers of medicine might lessen the tendency to inflammation, and restore him to a little better tone and strength to bear such an operation.

In this, however, I was disappointed; it would therefore be tedious, and intruding unnecessarily on the time of the Society, to go through the detail of medicines prescribed; suffice it to say, that they were found inadequate, either to lessen the violence of his fits, or to augment his strength, for in the month of October he had a more than usually violent attack, that lasted him five days, and reduced him to the lowest ebb.

It was a few days after this last violent attack, that I first perceived his urine dribbled from him involuntarily, that he had a constant sense of smarting in the whole course of the urethra, and that he had lost all power of propelling the urine forward, or of retaining it. Even the action of the abdominal muscles, as in straining, produced no water from the bladder.

Here a new symptom presented itself to our notice, which is worthy of our most serious attention, namely, that of an inability in the bladder to act upon its contents, arising probably from the repeated inflammatory actions to which it had been subjected; yet the general irritability of the system remained as great as ever, and it seemed even to increase with his diminished strength.

The patient being in this wretched state, a consultation was held on the second of November, when a retrospect of his past symptoms, and a careful examination of his present ones were fully considered, and it was idetermined, that the operation should be immediately performed, though it was perfectly understood to be under the pressure of the most disadvantageous symptoms; yet it was thought to

hold out some faint hope of relief; and it seemed certain, that, unless it was had recourse to, he must inevitably sink, worn out by constant pain and misery.

I performed the operation next day. The obstructions in the urethra before mentioned, being with some difficulty overcome by the staff, an impediment to the full introduction of the gorget occurred, that certainly arose from the beak of the instrument coming directly against the stone, which prevented its farther introduction into the bladder, till it evidently slipped between the stone, and the coats of the bladder, where it was tightly wedged in; however, as I could feel the stone with my finger at the end of the gorget, I passed the forceps, and, with considerable difficulty, expanded them sufficiently to lay hold of the stone, which broke with moderate compression. About two-thirds of it came away in the forceps, preserving so evidently its convexity, as clearly to give the form, and an idea of the quantity remaining in the bladder. This being but small, was soon removed, and the patient taken to his bed.

Symptoms of inflammation soon manifested themselves, and extended to the abdomen, loins, and thorax. The warm bath, poppy fomentations, leeches, clysters, &c. were carefully, though ineffectually administered, as the patient died on the fourth day after the operation.

On examining the body immediately after death, the belly was observed to be of a dusky hue, emphysematous, and distended. Not getting permission at that time for farther investigation, I was obliged to wait ten days before I could give the appearances of the interior parts, which were as follow: — On dividing the integuments, the same dusky colour was noticed, which is a morbid tint, well known to those who are conversant in inspecting diseased parts, and perfectly distinct from that which is the result of putrefaction after death.

As nothing peculiar presented itself in the viscera in general, I shall confine my account to the state of the kidneys, bladder, and rectum. The left kidney was very small, loose in its texture, and its ureter scarcely discernible; the right kidney was enlarged and flabby, its ureter about the size of a goose quill, and much incrusted with calcareous matter where it entered the bladder. The bladder was very much diminished; hard, and resisting to the touch. On the left side was discovered the wound made in it by the introduction of the gorget; and a section being made through the bladder on the right side. and a portion of it removed, brought to view the great thickness of its coats, its lessened cavity, and a considerable deposit of calcareous matter adhering to the inner surface. The two plates annexed will assist in explaining this case; they represent a portion of the parts which, from unavoidable delay, were not taken out till considerable putrefaction had rendered them soft, and in some degree obscure; the plates, however, portray the true character of the most prominent morbid appearances. The rectum was nearly as usual, except only, that it participated in the inflamed and discoloured appearance of all the neighbouring parts.

From the foregoing history of this case, and from studying the morbid appearances, some useful observations are deducible, that may tend to strengthen the judgement of the young practitioner, and assist him in forming his opinion, and in reasoning from the symptoms up to their causes.

To elucidate this more clearly, it may not be improper to make a short recapitulation of some of the leading symptoms. In the first place, the unusual susceptibility to inflammatory action, that shewed itself so often over the whole belly, is a symptom not very frequent, and when it does occur, is rarely overcome: moreover it appears from this case, that each succeeding inflammatory attack made such havoc in the constitution, as to bring on worse symptoms, and encreased debility. Therefore, when so alarming a symptom has clearly manifested itself, with all its train of consequences, and when the primary cause has decidedly been found to be a stone in the bladder, I should be inclined to allow but a short time for a trial of the: powers of medicine to strengthen the habit and to allay such irritation, but should propose the operation at an early period, while the bladder retained

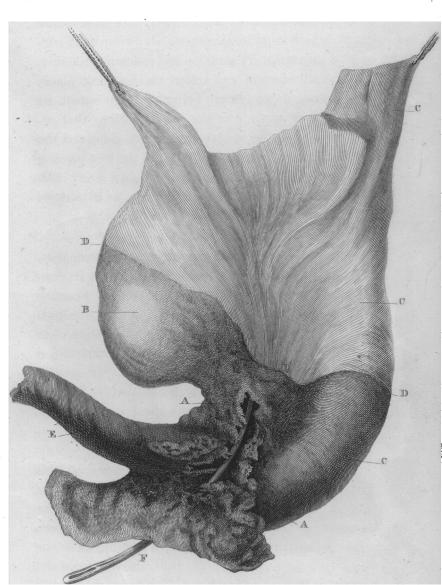
its power of acting on its contents. I am aware that this would be to perform the operation under very unfavourable circumstances, yet the case before us sufficiently shews, that there is no reason to expect any amendment can take place, whilst the original cause of the mischief remains; and it may also be observed, that in such instances, each succeeding fit renders the bladder more likely to be deprived of its muscular powers; and when such an event has actually taken place, great doubts may arise as to the propriety of venturing on the operation at all. For if the immediate cause of this privation of action should proceed either from local paralysis, or from the deposit of coagulable lymph, great impediments in either case will probably arise to obstruct the progress of healing, if not to subvert its first principles; should it arise from the former cause, the want of nervous energy might leave the wound in statu quo, till nature were quite exhausted; and if from the latter, (that is from the deposit of coagulable lymph) the muscular fibres of the bladder might be completely blocked up by such an accumulation, and the process of healing would of course be greatly impeded by this mechanical pressure, so that, though the first principles of the healing process might not be destroyed, they would be at least so far weakened as to leave great doubts of their possessing sufficient power to shoot forth the new substance necessary to complete the healing of the parts.

In the preparation before us, we see the thickened

coats of the bladder, with deposits of coagulable lymph, which must have accumulated from each successive inflammatory attack; and it seems probable, that the adhesions of calcareous matter took place, by the coagulable lymph being thrown out on its inner surface in some of the inflammations that occurred prior to the severe one, which deprived the bladder of its power of action, as, in the first passing the sound, it seemed to strike against stony matter on both its sides, in some degree, as if wedged in between two stones.

From this view of the case, it would seem, that, after the inability of the bladder to act upon its contents has shewn itself, a very different practice must follow, from that where the bladder possesses its powers of expulsion, and retention; in cases where these remain, I have recommended proceeding early to the operation for the reasons I have given, but in cases where the bladder has lost those powers, I do not think the operation advisable, or that it would be attended with success.

I must acknowledge that my reflections on this case have influenced my practice, and I have since cut, at an early period, one patient, in whom the extreme tendency to extensive inflammatory action shewed itself, nearly in as great a degree, as in the instance I have related; the inflammation from the operation was considerable, but it was moderated by the usual remedies in a few days, and in five weeks the patient was perfectly well.



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Since that time I have refused to cut two patients, where the debility was considerable, and where the action of the bladder was intirely lost.

I have thus given to the Society a narration of the symptoms, progress, and fatal termination of the case in question, and of the appearances on dissection; and I am not without hopes, that the information to be derived from it may have some beneficial effect in the future treatment of similar cases. The object I have had in view, by this communication, will then be completely attained.

T. FORSTER.

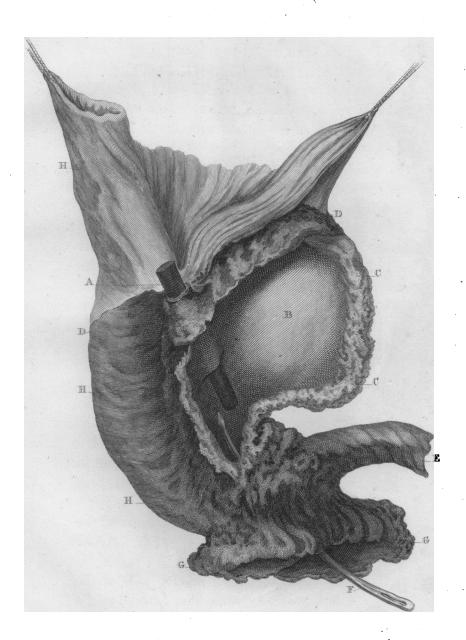
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EXPLANATION OF THE PLATES.

PLATE I.

LEFT SIDE.

- A. A. The extent of the wound made by the gorget.
 - B. The bladder, in part covered by the peritoneum.
- C. C. The rectum, partly covered also by the peritoneum.
- D. D. The edges of the peritoneum.
 - E. The penis.
 - F. A probe passed from the external wound in perineo into the bladder.



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PLATE II.

RIGHT SIDE.

- A. A. A bougie passed through the ureter, into the bladder.
 - B. The cavity of the bladder.
- C. C. The thickened coats of the bladder.
- D.D. The edges of the peritoneum.
 - E. The penis.
 - F. A probe passed through the incision in perineo into the bladder.
- G.G. The integuments, with the anus, and the incision in perineo.
 - H. The rectum, its upper part, as well as the upper part of the bladder, covered by the peritoneum.